For Research Use Only.
Not for use in diagnostic procedures.

Anti-SLC43A1/LAT3

CODE No. BMP098

CLONALITY Polyclonal
ISOTYPE Rabbit Ig, affinity purified
QUANTITY 100 μL

SOURCE Purified Ig from rabbit serum
FORMURATION PBS containing 50% Glycerol (pH 7.2). No preservative is contained.
STORAGE This antibody solution is stable for one year from the date of purchase when stored at -20°C.

APPLICATIONS-CONFIRMED

Western blotting 1:250 for chemiluminescence detection system
Immunohistochemistry 1:1,000
Heat treatment for paraffin embedded section:
Autoclave; 125 ℃ for 5 minutes in 10 mM citrate buffer (pH 6.0) containing 0.05% Tween-20

SPECIES CROSS REACTIVITY on WB

Species	Human	Mouse	Rat	Hamster
Cells	Transfectant	Not Tested	Not Tested	Not Tested
Reactivity	+			

Entrez Gene ID 8501 (Human)

REFERENCES

1) Sekine, Y., *et al.*, *J. Am. Soc. Nephrol.* **20**, 1586-1596 (2009)
2) Babu, E., *et al.*, *J. Biol. Chem.* **278**, 43838-43845 (2003)
3) Cole, K. A., *et al.*, *Genomics* **51**, 282-287 (1998)
4) Chuaqui, R. F., *et al.*, *Urology* **50**, 302-307 (1997)

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RELATED PRODUCTS

BMP013	atni-SLC3A1
BMP090	atni-SLC3A2
BMP011	anti-SLC7A5
BMP019	anti-SLC7A7
BMP039	atni-SLC7A1
BMP040	anti-SLC7A3
BMP041	anti-SLC7A8
BMP042	atni-SLC7A14
BMP057	anti-SLC7A4
BMP021	anti-SLC7A9
BMP056	anti-SLC7A10

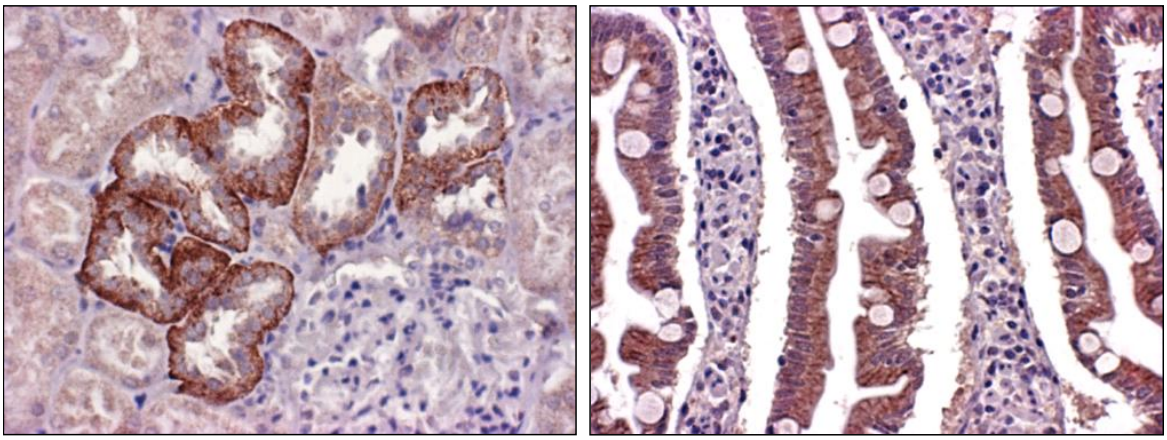
8460	Histostar™ (mouse + rabbit)
8469	Histostar™ DAB Substrate Solution

Immunohistochemistry for formalin fixed paraffin-embedded section

1) Deparaffinize the sections with Xylene 3 times for 5 minutes each.
2) Wash the slides with Ethanol (100%, 95%, 90%, 80%, 70%) for 3 minutes each.
3) Wash the slides with PBS 3 times for 5 minutes each.
4) Heat treatment

   Heat treatment by Autoclave:

   Heat the slides immersed in retrieval solution [10 mM citrate buffer (pH 6.0) containing 0.05% Tween-20] at 125°C for 5 minutes in pressure boiler. After boiling, the slides should remain in the pressure boiler until the temperature is cooled down to 80°C. Let the immersed slides further cool down at room temperature for 40 minutes.
5) Remove the slides from the retrieval solution and cover each section with 3% H_2O_2 in PBS for 10 minutes at room temperature to block endogenous peroxidase activity. Wash 2 times in PBS for 5 minutes each.
6) Remove the slides from PBS, wipe gently around each section and cover tissues with blocking buffer (0.5% BSA, 5% Normal goat serum in PBS) for 30 minutes at room temperature to block non-specific staining. Do not wash.
7) Tip off the blocking buffer, wipe gently around each section and cover tissues with primary antibody diluted with blocking buffer as suggest in the **APPLICATIONS**. (The concentration of antibody will depend on the conditions.) Incubate the sections for overnight at 4°C.
8) Wash the slides 3 times in PBS for 5 minutes each.
9) Wipe gently around each section and cover tissues with Histostar™ (mouse + rabbit) (MBL; code no. 8460). Incubate for 1 hour at room temperature. Wash as in step 8).
10) Visualize by reacting for 10 minutes with Histostar™ DAB Substrate Solution (MBL; code no. 8469). *DAB is a suspect carcinogen and must be handled with care. Always wear gloves.
11) Wash the slides in water for 5 minutes.
12) Counter stain in hematoxylin for 1 minute, wash the slides 3 times in water for 5 minutes each, and then immerse the slides in PBS for 5 minutes. Dehydrate by immersing in Ethanol 3 times for 3 minutes each, followed by immersing in Xylene 3 times for 3 minutes each.
13) Now ready for mounting.

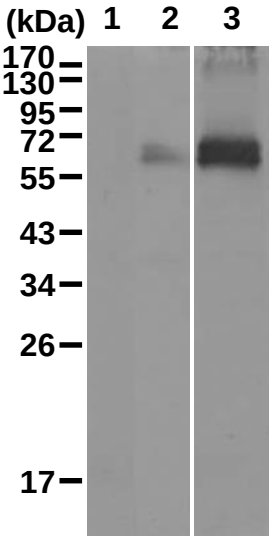


Immunohistochemical detection of SLC43A1

Left: Kidney
Right: Small intestine
Immunohistochemical staining with BMP098
Normal human tissue array (MBL) was used for this application.

SDS-PAGE & Western blotting

1) Wash 2 x 10^6 cells 3 times with PBS and suspends them in 100 μL of Extraction buffer (10 mM Tris-HCl (pH7.5), 150 mM NaCl, 1% Triton X-100, 1% Sodium deoxycholate, 0.1% SDS), then sonicate briefly (up to 10 seconds).
2) Centrifuge the tube at 12,000 x g for 5 minutes at 4°C and transfer the supernatant to another tube.
3) Add equal volume of Laemmli's sample buffer, and then incubate the samples for 1 hour at 37°C and centrifuge. Load 10 μL of the sample per lane in a 1-mm-thick SDS-polyacrylamide gel (12.5% acrylamide) for electrophoresis.
4) Blot the protein to a polyvinylidene difluoride (PVDF) membrane at 1 mA/cm^2 for 1 hour in a semi-dry transfer system (Transfer Buffer: 25 mM Tris, 190 mM glycine, 20% MeOH). See the manufacturer's manual for precise transfer procedure.
5) To reduce nonspecific binding, soak the membrane in 5% skimmed milk (in PBS, pH 7.2) for 1 hour at room temperature.
6) Incubate the membrane with primary antibody diluted with 1% skimmed milk (in PBS, pH 7.2) as suggested in the **APPLICATIONS** for 1 hour at room temperature. (The concentration of antibody will depend on the conditions.)
7) Wash the membrane with PBS (5 minutes x 3 times).
8) Incubate the membrane with the 1:5,000 HRP-conjugated anti-rabbit IgG (MBL; code no. 458) diluted with 1% skimmed milk (in PBS, pH 7.2) for 1 hour at room temperature.
9) Wash the membrane with PBS (5 minutes x 3 times).
10) Wipe excess buffer on the membrane, and then incubate it with appropriate chemiluminescence reagent for 1 minute. Remove extra reagent from the membrane by dabbing with paper towel, and seal it in plastic wrap.
11) Expose to an X-ray film in a dark room for 3 minutes. Develop the film as usual. The condition for exposure and development may vary.



Western blot analysis of Myc-tagged SLC43A1

Lane 1: Parental cell (293T)
Lane 2 and 3: Myc-tagged SLC43A1/293T

Immunoblot
Lane 1 and 3: BMP098
Lane 2: anti-Myc-tag (MBL; code no. M047-3)